

POWER GENERATION SYSTEM SUPERVISOR*Class Definition*

Under general supervision, plans, schedules, and supervises the operation, maintenance and repair activities of the power generation facility at the City's Wastewater Treatment Plant and participates in projecting and developing the power resource requirements and portfolio for the City.

Distinguishing Characteristics

Power Generation System Supervisor is a first-line supervisory class in the Wastewater Management Division. Reporting to the Chief of Wastewater Facilities Maintenance, the incumbent plans, schedules and supervises the operation, maintenance and repair activities of the power generation facility and, in consultation with the Director of Public Utilities, participates in projecting and developing the power resource requirements and portfolio for the City, the latter of which requires a close working relationship with representatives of other City departments and energy providers. This class is distinguished from Chief of Wastewater Facilities Maintenance in that the incumbent of the latter directs the overall activities of the operation and maintenance sections. This class differs from Wastewater Treatment Maintenance Supervisor in that incumbents of the latter are responsible respectively for the maintenance activities of wastewater treatment at the plant. It differs from Power Generation Operator/Mechanic in that incumbents of the latter perform journey-level assignments in operating, maintaining and repairing dual-fuel/clean-burn gas engines generating electric power and related auxiliary equipment.

Typical Tasks

(This list is neither inclusive nor exclusive. Consequently, this information may not reflect Essential Functions for this class.)

Supervises the operation of the power generation facility including the work activities of employees engaged in operating, maintaining and repairing large dual-fuel/clean-burn gas engine-driven generators, gas compressors and auxiliary equipment.

Plans, schedules, assigns, directs and evaluates the work of subordinate employees.

Negotiates long term purchase and sale of energy; and serves as the utility liaison with regulatory agencies.

Maintains power and natural gas contracts with other utilities, marketers, brokers, the California Independent System operator, and the California Power Exchange.

Monitors and assesses energy market developments and price trends and assists in managing the City's power and natural gas resource portfolio.

Forecasts the City's total system and retail electric load; develops resource plans to supply this load and meet other wholesale commitments; prepares cost projections for power and natural gas purchases.

Coordinates all shut downs and repairs to ensure that other sections continue to operate at optimum efficiency; directs and supervises major repairs and overhaul of engines and equipment.

Evaluates, keeps records and makes reports about the overall operating efficiency of the power generation facility, and prepares and directs the preparation of necessary reports, logs, and other data.

Monitors compliance with air pollution regulations, taking corrective action as required, and keeping superiors informed as to compliance or lack thereof; utilizes plant computer system for monitoring and controlling plant operation activities and producing records and reports.

Conducts regular inspections of all phases of power facility operations and keeps superiors informed.

Instructs subordinate personnel in the safe operation and maintenance of engine-driven generators and auxiliary equipment.

Conducts periodic safety training, inspections and drills in the facility particularly with regard to employee work procedures, potential emergency situations, and hazards accompanying explosive gases and flammable or toxic liquids.

Maintains inventory control of expendable supplies and replacement equipment parts, ordering supply replacements as required.

Assists with budget preparation and monitors allocations to ensure that operations are kept within budget.

As required, performs the duties of power generation operator/mechanics.

Performs related duties as required.

Knowledge, Abilities, and Skills

Knowledge of the operation, maintenance, and servicing of large dual-fuel/clean-burn engines, generators, compressors and related auxiliary equipment.

Knowledge of the safety rules, codes, procedures and precautions relating to large stationary engines and auxiliary equipment, including explosive gases, flammable or toxic liquids, moving machinery parts, and pressure components.

Knowledge of the layout, equipment, instrumentation and functions of an electrical generation, transmission and distribution system.

Knowledge of the principles, procedures and practices of manual and automatic switching operations of generating equipment.

Knowledge of the methods, tools and equipment used in repairing and overhauling dual-fuel/clean-burn engines, and air and gas compressor units.

Knowledge of modern supervisory principles and practices.

Knowledge of air pollution regulations.

Ability to supervise, train and instruct subordinates engaged in the operation, maintenance and repair of large dual-fuel engines and auxiliary equipment.

Ability to evaluate potential resource arrangements with other utilities/agencies, and participate in the development of strategic business plans related to energy supplies.

Ability to interface and maintain compliance with regulatory agencies such as the Federal Energy Regulatory Commission, California Public Utilities Commission and California Energy Commission.

Ability to learn new procedures and readily adapt to changing technology.

Ability to recognize abnormal operating functioning and take appropriate action.

Ability to keep necessary written records and communicate effectively orally and in required reports.

Ability to establish and maintain effective working relationships with others.

Skill in operating and maintaining dual-fuel/clean-burn engines and auxiliary equipment and making the necessary timely adjustments to meet various operating needs.

Minimum Qualifications

Two years of increasingly responsible supervisory experience in the operation, maintenance and repair of mechanical and electrical equipment similar to that used in an engine-driven electrical power generating plant; or, two years of supervisory experience with an electric utility in power system dispatch, operations, resource planning, government relations and/or utility contracts administration.

Necessary Special Requirement

Possession of a valid California Driver's License may be required at time of appointment.

APPROVED: _____
Director

DATE: _____